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## CHANGES IN THE VECTOR OF INDUSTRIAL POLICY AND POSSIBILITIES FOR THE INNOVATIVE DEVELOPMENT OF THE INDUSTRIAL REGIONS<sup>1</sup>

*In the present paper, reasons for the increased interest in industrial policy in both developed and developing countries are explained. The systematisation of the results of the development of Russian industry from 1989 to 2014 showed a lack of systematic selection of its priorities, preventing the formation of a strategic vector of industrial policy. The target diversity of the industrial policy is established at the different economic development stages of the country. In the context of economic sanctions against Russia, it is shown that the emergence of a new industrial policy vector is connected to the need for import substitution and concomitant changes in the development model of the domestic economy. The dynamics and characteristics of the industrial development area are shown by the example of a highly developed region like the Central Urals. The total level of organisational innovation activity continues to be low and composes only 12%, although in the manufacturing sector this index is higher than the regional economy index by four absolute percentage points. The industrial policy of the Central Urals is analysed and innovation drivers of the industrial sector of the regional economy are established. The possibilities of the defence, civil engineering, mining, chemical/pharmaceutical and forestry complexes of the Sverdlovsk Region to implement its import substitution policy are explained. The most significant investment projects that will reduce the import dependence of the regional economy are presented. The possibilities of the research sector and created innovation infrastructure of the region in solving this problem are shown. It is necessary to develop the regional laws on the elaboration of industrial policy according to the basic regulations of the Federal Law "On Industrial Policy in the Russian Federation."*

**Keywords:** industrial policy, industrial region, economic sanctions, defence industry, import substitution, innovation infrastructure

### Instead of introduction

The systemic global financial crisis of 2008-2009 attracted significant attention to industrial policy. In the words of some analysts, the modern world is experiencing a renaissance of the active industrial policy<sup>2</sup>, although in the opinion of other leading experts of the field – the successful economies of the world at all significant stages of their development achieved positive results precisely due to the active industrial policy [1-4].

Among the reasons that lead to the industrial policy usage both in the developed and developing countries, we can note the following. The crisis has demonstrated that the severity of the structural problems in many countries was the factor behind the depth of the crisis and the success of the recovery process. From this followed the urgent development of public policies aimed at reducing disparities, not only between the individual sectors of the economy, but also the regional imbalances in the country's development. In addition, to avoid the prospects of a long-term stagnation, the governments began to encourage the growth not only due to increased demand, but also due to a variety of efforts to improve supply. Such measures were designed to support the separate affected sectors and companies; they included infrastructure investments and the support of advanced technologies. A number of developing countries were able to successfully overcome or even "avoid the crisis" through industrial policy; this sufficiently important factor attracted the attention of the developed countries. In the first place, this concerns China – the country that actively uses various instruments of state industrial policy and thus managed to overcome the crisis relatively painlessly.

Regardless of the dominant economic model in the particular country (market or planned), the prevalence of vertical or horizontal elements in industrial policy, dominant implementation

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<sup>2</sup> For a European Industrial Renaissance.EC. Brussels. 01.22.2014, 25 p. [Digital resource]. URL: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52014DC0014> (data handling 06.25.2015); The Industrial Structure vision 2010. URL: [http://www.meti.go.jp/English/policy/economy/pdf/Vision\\_Outline.pdf](http://www.meti.go.jp/English/policy/economy/pdf/Vision_Outline.pdf) (date of access: 25/06/2015).

mechanisms, the declared vector of its changes was aimed at a transition from state industrial policy to a multi-subject policy. This transition is a consequence of the increased risk of setbacks in the implementation of the industrial policy, especially when corruption is rampant in the economy and the political regime is not strong enough to counter it [5].

In such circumstances, the significance of building constructive and fair relations between the state and business increases along with the importance of broadly involving the expert community and civil institutions in the agreed priorities of the development of industrial policy. However, in many developed countries, particularly in the United States, after the crisis of 2008-2009 the government not only actually performed the SMART-functions related to the definition of the development goals and setting of the most important tasks, but also increased its direct involvement in the implementation of the development priorities.

Despite the numerous studies devoted to the various aspects of the industrial policy, there is still no generally accepted concept of this phenomenon. The variety of views on this subject can be reduced to two aggregated positions. The first of these considers industrial policy in the narrow sense, as the governmental actions aimed at promoting individual strategic – mostly novel – industries or types of production, creating the best opportunities for economic growth [6-8]. The supporters of the alternative view understand industrial policy in a broad way, as aimed at selective support of certain sectors of the economy as a whole, its structural transformation, and not only on the support of the relevant processes in the industrial sector of the economy [3, 9-11].

In the present paper, industrial policy is viewed in the narrow sense, i.e. as a tool that enables the formation of a competitive, structurally balanced, high-tech industry. This is the correct approach in this case because industry is not only an important factor of economic growth but also a key factor in achieving national competitiveness.

### **The Direction of the Industrial Policy Vector in Russia**

The peculiarity of Russian industrial policy during the period from 1989 to 2014 inclusive was the lack of a defining development vector of the industry from a long-term perspective and its unsystematic implementation with the absence of the federal legislative framework. From 1989 to 1991, industrial policy was not seen as a tool for the selective support of the strategically important sectors of the economy because it was assumed that the market would put everything in its place. The degradation of the industrial and technological production structure resulted in the implementation of the selective support given to priority sectors from 1992 to 1993; however, the lack of positive dynamics in the development of science-intensive productions and increased rent seeking due to special relations between business and the state changed the vector of the industrial policy (1994-1998) in the direction of support for commercially effective projects. The implementation of such industrial policy measures did not lead to the positive structural changes in the subsequent period (1998-2000). In Russian governmental circles, the issue of industrial policy was not even raised. Then, under the predominance of the liberal model of the economic development in Russia (2001-2005), horizontal industrial policy tools were used, supplemented in 2006-2008 by selective state support measures for priority activities. After the crisis of 2008-2009 in Russia a new vector of the industrial policy was aimed at the stimulation of domestic demand, the realisation of anti-crisis modernisation and diversification of the economy. From 2012 to 2014, after the May decrees of the President of the Russian Federation (2012), a vector of the industrial policy changed again in the direction of a new industrialisation of the Russian economy. [13]

It is evident that in Russia during this period (1989-2014) there was a lack of systematic selection of priorities, with the strategic vector of industrial policy having yet to be formed. Within the framework of this vector, essential tactical measures dictated by the current situation could have been implemented at certain stages without contradictions with the general policy objectives.

The 2014 foreign policy crisis, the largest in recent history, determined the emergence of new industrial policy aspects related to the numerous economic sanctions applied to Russia. Their negative impact has already caused job cuts and a deterioration in the investment climate as well as reducing business activity and GDP growth rates. However, the impact of the economic sanctions is greatly enhanced due to the additional measures of a military-political nature. According to some experts, the growth of military expenses could be more devastating for the economy of the country than the economic sanctions [12, c. 68].

The sanctions refuted the belief that existed for many years that, in an era of globalisation, priority should be given to the economic interests of transnational corporations and that governmental policy is largely a consequence of realising their interests. In today's situation, the economic interests of the business community no longer prevail over the political decisions of the state. The industrial policy in this period thus acquires new features. While nominally a multi-subject industrial policy, in actuality it became state policy, implementing even inefficient economic decisions that were dictated by the political considerations.

The new trend in the formation of industrial policy also determined the complete exhaustion of the possibilities of the former economic model, the need for a fundamental change that has developed over the past 15-20 years. Among many suggestions for the promising model of the economic development, in our opinion, the "model of growth stimulation" is especially noteworthy: its central idea is the formation of strong incentives to improve the efficiency of business and the system of state regulation; ensuring the equal responsibility of all companies for their performance; a rejection of "industrial paternalism", the protection of property rights [13]. Naturally, the implementation of such a model requires a profound change in the industrial policy, which in this case could act as a tool for establishing a new model for economic development.

The formation of a system of measures to accelerate the import substitution on a wide range of directions becomes the determinative vector of the industrial policy in today's Russia. Considering the high dependence of the Russian economy on imports (imports exceed 15% of GDP [14] the military industry uses up to 30% of imported parts, the aerospace and aviation industry up to 65-70%, pharmaceuticals nearly 80% [1]), the industrial policy of the country should be directed at a prevention of the possible failures in providing the state with a variety of industrial and consumer goods and services. However, it should also permit a solution to the problem of the diversification of production, reducing the role of raw materials in the structure of the economy and as sources for replenishing federal and regional budgets.

Such a situation has once again brought its adjustments in the formation of a defining vector in the industrial policy of Russia; in the current period, it is connected with solving the problems of import substitution. In order to be successful in the long term, industrial policy, implementing the strategy of import substitution, should encourage the emergence of new businesses, whose products should be oriented towards global markets. At a time when Russia faces numerous sanctions, the creation of new businesses without governmental involvement is virtually impossible. This new feature reinforces the significance of the state and should also make adjustments to the modern industrial policy. It can only be successful in the case of finding the right balance between the policy of the import substitution as the consequence of the sanctions and the increasing diversification of the economy, on the one hand, and large-scale state industrial policy, implementing the long-term interests of the Russia's economic development as a country aspiring to the leading positions in the world market in several areas, on the other.

Ensuring the long-term interests of Russia is impossible without taking into account the spatial organisation of national industry. Industrial regions make a significant contribution to the economic development of the country, employment, solving the problems of the budget system, etc. However, due to the existing development potential, structural and technological, socio-economic, and institutional features, each of these regions develops its own system of priorities, its own mechanisms for industrial policy that do not contradict but rather supplement similar positions at the federal level. The Central Urals is one of these typical industrial regions in which the innovative development opportunities of the region are largely determined by the implementation of the well-thought industrial policy.

### **Industrial policy of the Central Urals**

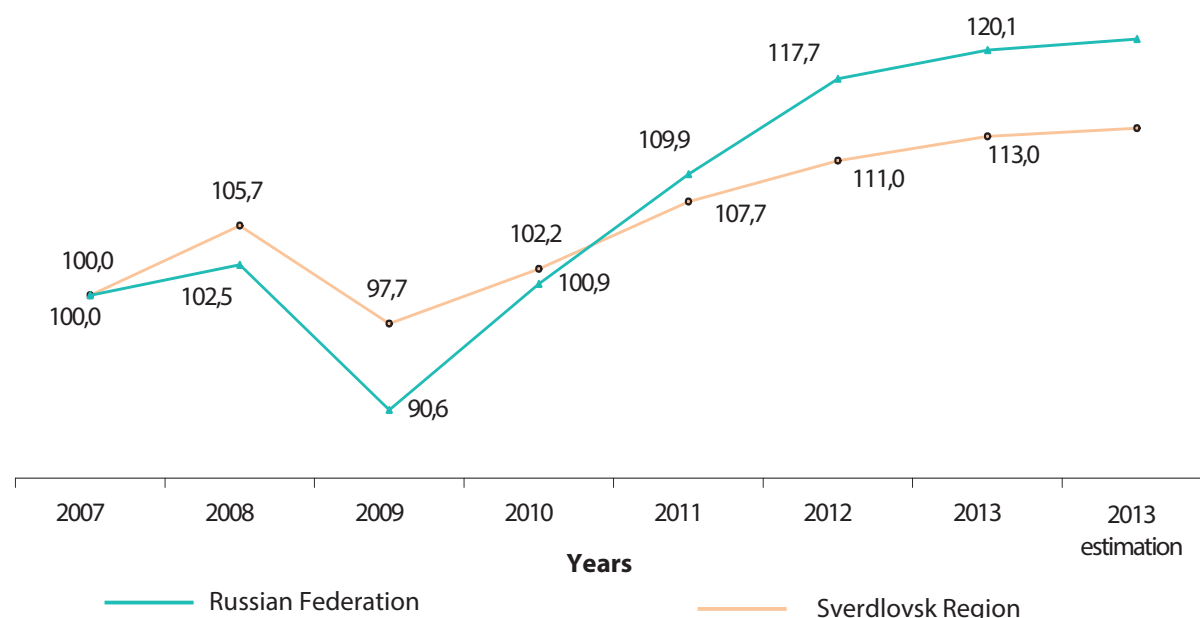
The Sverdlovsk Region is a highly urbanised area; the contribution of its economy into the country's GDP is around 3%. In terms of GRP it ranks 6th among the regions of the Russian Federation. The region is one of the largest industrial areas of the Russian Federation and one of ten major regions that account for around 50% of Russia's industrial output. The basic indexes of the socio-economic development of the region are shown in Table 1.

In recent years, the economic development of the Central Urals was uneven. The economy of the region could not escape the impact of the crisis of 2008-2009; however, already by 2010 the pre-crisis figures of 2007 were achieved and by 2011 the decline had been offset. Compared to the pre-crisis 2007

Table 1

**The basic indexes of the socio-economic development Sverdlovsk Region in 2007-2014, yearly average %**

Index	2007–2009	2010–2013	2014	2007–2014
GRP	99.7	107.2	100.8*	103.5
Industrial production index	94.0	108.8	100.8	102.0
Fixed Capital Investments	101.2	109.3	102.9	105.4
Real disposable income of the population	107.5	103.6	95.9	104.1

**Fig. 1.** The real GRP index for the Sverdlovsk Region in comparison with Russian Federation GDP, % compared to 2007

figure, the real GRP index was 109.9% in 2011 and 121.0% in 2014; the corresponding figures for the Russian Federation were 107.7% and 113.7% respectively (Fig. 1).

In 2007-2014 more than 2.3 trillion rubles of investments in fixed capital were attracted to the economy of the Central Urals, allowing the region to occupy a leading position among other regions of the Russian Federation. The industrial complex occupies the dominant position in the development of the regional economy. In 2007-2014, the industry of the Sverdlovsk Region was developing under difficult conditions. In contrast to the economy as a whole, the industry of the region was only able to achieve the pre-crisis level of 2007 by 2012. In 2014, the share of industrial enterprises accounted for 75.1% of the total volume of the shipped products by large and medium enterprises of the Sverdlovsk Region, 72.3% of the net profit and 28.7% of the employment of the working population. In 2014, compared to 2007, output per employee had increased in comparable prices by 37.6%, at actual prices by 2.2 times (Table 2).

Table 2

**Basic indicators of industrial production Sverdlovsk Region**

Index	2007	2008	2009	2010	2011	2012	2013	2014
Volume of shipped industrial products, bln. rubles	896	988	806	1105	1336	1441	1478	1531
Share of industrial production in the GRP, %	40.1	40.0	35.5	37.8	36.6	33.0	31.8	n/a
Industrial production index, % to previous year	107.3	95.4	81.1	117.3	106.2	109.6	102.7	100.8
Production (volume of the shipped products per 1 employee), 1000 rub.								
prices for 2014	2500.9	2481.8	2254.3	2782.1	2910.5	3179.4	3301.6	3441.3
in actual prices	1600.4	1835.5	1677.1	2419.5	2881.7	3096.6	3212.7	3441.3



However, the output remains low in comparison with the performance of the leading world-class companies (in 2011 the industry of the Sverdlovsk Region accounted for 26% of the global total).

The steel industry is the backbone industry of the region; it includes large-scale production of ferrous and non-ferrous metals and metalwork. By the end of 2014, the share of the steel production accounted for 47.5% of the total volume of the shipped industrial production. The second most important industry is the machine-building complex, with a 20.9% share in the total volume of the shipped industrial production in 2014.

The fundamental document on the formation of the industrial policy in the Central Urals was the concept of the industrial policy of Sverdlovsk Region, developed by IE UB RAS, together with the Ministry of Industry and Science of Sverdlovsk Region and adopted by the regional government in 1999. During that period, the key objective of the industrial development of the region was the achievement of sustainable stabilisation and further development of a competitive structurally balanced industry, which should have ensured improved socio-economic conditions for the population<sup>3</sup>.

For the first time in Russia, in order to elaborate the provisions of the Concept in the Central Urals, the Sverdlovsk Region Ministry of Economics, working together with IE UB RAS, developed a development and placement scheme of the productive forces of Sverdlovsk Region for the period until 2015. It is important to note that the import substitution and development of the industrial cooperation were already allocated in the Scheme among the key priorities of the industrial policy of the region. The principal provisions determining the goal, objectives and priorities of the regional industrial policy, written in the Concept of the industrial policy and in the Scheme of the productive forces development and placement in Sverdlovsk Region for the period until 2015, were developed in the Programme for the Sverdlovsk Region's socio-economic development for 2011 - 2015. However, many of the objectives and most of the declared parameters of the economic growth were not achieved (Table. 3).

Along with a number of objective reasons, related, first of all, with the world economic crisis of 2008-2009, conflicting priorities of the economic policy at the federal level, the unfavourable situation on the world market, etc., the achieved results were also caused by the lack of the effective governmental mechanisms at various levels and the relatively poorly functioning efficiency of the economic entities.

Table 3

**Target and achieved values on the key indicators of the economic growth of Sverdlovsk Region**

No i/o	Index name	Measure	Target value of the indicator according to the Scheme, 2015 (prices for 2005)	Target value of the indicator according to the SOD Programme 2015 (At current basic prices)	Achieved value of the indicator at the end of 2014 (At current basic prices)
1.	Gross regional product	bn. rub.	1066.05–1125.84	2015.0	1675.8 (estimated)
2.	Volume of shipped products in the industry (on a circle of large and medium-sized organisations)	bn. rub.	1204.77	2390.0	1531.3
3.	Fixed capital investments	bn. rub.	340.88–397.10	520.0–600.0	370.4
4.	Share of innovative companies in the industry of the total number of organisations	%	n/a	17.0	11.5

In spite of the incomplete execution of the economic development plan of the Central Ural, the industry of the region as the economy of the region as a whole continued its development under the difficult macroeconomic conditions of the recent years. As a result of the modernisation programme's realisation and technical re-equipment, production facilities of the metallurgical, defence, mechanical engineering, and construction materials enterprises have been renewed. New production was created in the chemical and pharmaceutical industry, metallurgical industry, and medical instruments engineering industry. On the basis of the principles and mechanisms of the state-private partnership lay the foundations of the regional personnel training system for the industry, which meets modern

<sup>3</sup> Resolution of the Government of Sverdlovsk Region of November 3, 1999 No.1266-PP "On the Concept of Industrial Policy of Sverdlovsk Region" // Collected Legislation of Sverdlovsk Region. 1999. №11. p. 1150. See also [15].

requirements and has the necessary competence, and the innovative industrial infrastructure was developed.

### **Drivers of the Development of Innovation in the Central Urals**

The innovative development of the Central Urals has always been the focus during the formation of all documents that define its development strategy. However, the aggregate level of innovation activity of the organisations continues to remain low, accounting for 12%. In the manufacturing productions this index is higher than in the economy of the region as a whole by four absolute percentage points.

Scientific research sector in the Sverdlovsk Region is developed sufficiently. The effective use of its resources creates certain opportunities for the industrial development of the Urals on the basis of innovation. About 21,000 people or about 1% of the economically active population of the region are involved in the scientific research and development in the Central Urals. Around two thirds of all organisations of the Ural Federal District, which practice research and development, are located here. More than 1,000 organisations are engaged in various scientific, technical, design and development, engineering and innovation activities, 110 of them are basic and specialised, having the necessary scientific, industrial, standard and technical basis, as well as highly qualified specialists.

The performance of the technological innovation is characterised by the indicators of the inventive activity. The Central Urals is among the top ten regions of Russia in the number of granted patents, ranking 5th in the Russian Federation and 1st in the Ural Federal District according to this indicator. In addition, the region occupies the 4th place among the regions of the Russian Federation and the 1st place in the Ural Federal District in the number of created advanced production technologies. Since 2007 to the present time 395 of these technologies were created in the Central Urals, or 50% of the established technologies in the Ural Federal District, 266 of these technologies are new to the Russian market.

A sufficiently strong scientific research sector provided the catalyst for the formation of the regional nanotech industry. In recent years, a number of major productions of nanoproducts was organised in the industrial enterprises of Sverdlovsk Region. The sales volume of shipped goods and services related to the nanotechnology exceeded 10.5 billion rubles according to the results of 2014. The total number of existing high-tech jobs in the field of nanotechnology is now about 950 units. The further development of one of the most important components of the 6th technological mode intellectual core increases the possibility of the innovative development of the industry in Sverdlovsk Region. However, the greatest opportunities in this area are connected with the development of the Ural defence industry complex.

Defence Industry Complex (DIC). DIC of the Central Urals is represented by more than 60 industrial enterprises and organisations, including the acquisition librarians for the defence procurement, as well as 13 research institutes and defence design bureaus. In addition, several dozen machine-building and engineering companies of the Central Urals supply materials, parts and components for the defence companies and organisations, providing them with the design and service of innovative character. In the last five-eight years, the organisational and institutional structures of the DIC have changed in the progressive direction. The majority of the defence enterprises of the Central Urals are now the part of the vertically integrated structures at the federal level.

The defence enterprises of the Central Urals develop and produce a wide range of weapons and military equipment; a civilian product range is also sufficiently represented. The manufacturers of the defence-industrial complex, which production accounts for 35-38% of the shipped machinery goods, have always occupied a special place in the economy of the Central Urals. Today, in the conditions of the State arms programme, the implementation of the role and importance of the defence industries as drivers of the innovation development of the region has only grown. Despite the fact that, in 2014, many Urals factories faced new challenges due to the imposition of the economic sanctions by the Western countries, the defence companies have significantly increased the volume of investments (129% compared to 2013), the volume of production increased to 109%. The enterprises and organisations of the defence industry in 2014 created more than 900 new jobs. The Defence Procurement is executed in full; its growth rate amounted to 111% compared to 2013.

Due to the participation of the defence industry enterprises of the Central Urals in the federal and regional governmental programmes on technical rearmament and production development in 2014, more than 28 billion rubles of investment funds were attracted. For example, JSC "Ural Design Bureau

“Detal” participates in seven federal programmes under which the amount of funds for re-equipment on the innovation basis by 2016 will amount to 1.5 billion rubles.

During the last three years about 11 billion rubles were invested in R&D of the defence industry organisations, about 50 new products were created, including the products for civilian use. About 100 intellectual property assets are registered every year. The use of new equipment and innovative technologies, for example, by JSC “Ural Optical and Mechanical Plant”, has allowed the average productivity of design and engineering subdivision to be increased by 3.7 times; the process of putting new products into manufacture has accelerated by more than 4 times.

The high level of the scientific and technological development of the defence industry enterprises, the availability of the private research basis and close interaction with the academic, university and branch science, active work to attract and retain qualified personnel – all this raises the possibilities of the defence enterprises in solving the national security problems and increasing the level of innovation development of the regional economy as a whole.

Branches of civil machine engineering. The potential for the civil machine engineering development is implemented mainly in the creation of new knowledge-intensive sectors and industries as a part of the network cluster structures, providing the cross-sectoral effects for the economy as a whole and oriented on the technologies improvement of the industries, the consumers of the innovative engineering products. In addition, the significant potential of the industry in the medium-term period lies in the implementation of the import substitution. The industry is actively going through the transformation processes of the organisational and economic structure, on the basis of the cluster forms formation for the production organisation, the cooperation agreements are successfully implemented.

In the field of tool-making industry with the participation of foreign investors in the Central Urals new assembly lines of modern metalworking equipment were organised (OOO “Ural Machine-Building Corporation “Pumori” “, OOO “GDS Ural”, Yekaterinburg), capable of manufacturing up to 100 NC machines annually. In 2014, the project of JSC “Sverdlovsky tool factory” was recognised as the complex investment of the federal level, it is aimed to improve the technological process and form fundamentally new production lines for cutting tools manufacture, hard-alloy tools, mass production of taps and drills, moulds and welding of band-saws to strengthen the competitive position in the face of foreign producers.

Mining and smelting complex. In the last decade the mining and metallurgical complex was the most dynamically developed sector of the industrial production of the Central Urals. The total volume of investment in the fixed capital of the industry during this period exceeded 300 billion rubles. As a result, productive facilities of the enterprises were renewed and modernised, new goods production was developed, productivity and overall production efficiency were improved and export potential was strengthened. The existing organisational, economic, and technological structures of production today meet market requirements and ensure the high competitive potential of the sector in the domestic and international markets. In this regard, the main task of the long-term development of the mining and metallurgical complex is to maintain high competitiveness and to further increase the economic efficiency of production on the basis of technical and technological renovation and modernisation of the enterprises. At the same time, during the creation of new metallurgical productions and the introduction of new technological solutions, attention is paid to the indexes of production and economic efficiency, along with compliance to environmental standards, including European norms, as well as the social development of the regions of mining and metallurgical enterprises.

To achieve the established priorities, the enterprises of the mining and metallurgical complex of the Central Urals now implement a number of large investment projects. Some of them are in the list of the priority investment projects of the Ural Federal District, approved by the Government of the Russian Federation. A unique investment project for Russia and Europe (with a value of about 33 billion rubles) was realised at JSC “Kamensk-Uralsky Metallurgical Works.” Its purpose is to ensure the economic security of the country through the establishment of the import-substituting domestic production of the innovative products for the strategic industries (construction of new aircraft, heavy rockets and large ships, etc.).

Chemical and Pharmaceutical Industry. The Chemical and Pharmaceutical industry is one of the sectors on which the intellectual core of the 6th technological mode is formed in today’s world economy. Additionally, this is the only segment of the manufacturing industries of the Central Urals whose share in the total structure of the manufacturing industries has grown over the past decade. The

range of main products of the chemical complex of the Sverdlovsk Region is wide and varied enough. Its development in the direction of increasing the output of high-tech products is based primarily on the establishment and effective functioning of the industrial-production zones of the advanced development, new high-tech chemical productions in small and medium-sized towns in the region through the industrial and innovation clusters creation. In particular, the pharmaceutical cluster is actively developing. As the part of its infrastructure development in 2014, an innovation and research biomedical technopark "Novouralsk" was registered, its strategic objective is to promote the commercialisation of the research results and innovative ideas of the participants.

**Innovative infrastructure development.** The major regional project in terms of the infrastructural support of the innovative development of the industry in the Central Urals is a plan to create a special economic zone (SEZ) of the industrial type Titanium Valley. The formation of the territorial technoparks network is going successfully and effectively in the Central Urals, the main goal of its creation is to form favourable infrastructural conditions for the development of small and medium-sized innovative industrial business and engineering. As of March 1, 2015, there were 10 technoparks, four of them private industrial parks that are registered in the technopark register of the Sverdlovsk Region. In 2014, the largest technopark of the high-tech industry in Russia, Universitetsky, was opened in the Central Urals; it was built under the framework of the state programme of the Russian Federation for the development of the national innovation system.

**Import substitution in ensuring the innovative development of the region.** According to the plan of priority measures to ensure the stable economic development and social stability in the conditions of mutual economic sanctions with Western countries, stimulation of import substitution was recognised as the priority of industrial policy by the Government of the Russian Federation<sup>4</sup>. Of course, the potential of the import substitution varies greatly in different industrial sectors and regions of the RF and depends on many factors. The problem of the import substitution in the defence industry acquires a particular importance in the current political situation. In the Central Urals the strategy of import substitution in the enterprises of the defence industry was launched in 2014. On the first stage of this strategy the tactics of replacement of one component supplier with another predominates. During 2014 as part of the SDO the defence enterprises replaced the supply of the imported products worth over 650 million rubles, including Ukrainian suppliers. The next stage of the strategy of the import substitution is the organisation of new Russian approaches to the production of goods.

The major direction of the import substitution in the Ural industry is connected with the development and introduction of new production technologies. Today, all industrial enterprises of the Central Urals use imported equipment and are more or less dependent on the imported technology. At the same time, it is impossible to ignore the fact that the domestic machine tool industry is currently unable to provide machinery equipment with the required quality, performance and range. Even in a long-term perspective, the development possibility of a number of domestic enterprises without foreign equipment looks problematic.

At the same time, civil engineering, mining and metallurgical industries and the chemical and pharmaceutical complex have considerable potential for import substitution. For example, about 30 major investment projects are now implemented in civil engineering, aimed at the development of import-substituting products for metallurgy, oil and gas complex, transport engineering, machine tools and the electronics and electrical industry.

### **Territorial Aspects of the Regional Industrial Policy**

The support of priority development of the sectors, drivers of the industrial growth and expansion of the domestic consumption market of new production technologies as well as the development of innovative and industrial infrastructure are necessary but not sufficient elements of the industrial policy for achieving the innovative development of the economy. Its tools, which would allow the industrial-economic potential of the municipal territories to be utilised, are needed. A significant place among them belongs to the support of large investment projects, linked to specific areas and support development programmes for small and medium enterprises as a factor forming the structural basis for economic growth in many areas. This aspect of the industrial development on four municipal

<sup>4</sup> Order of the Government of the Russian Federation of 27.01.2015 No.98-p // the Russian newspaper. 2015. No.19 (02 Feb.).



territories of the Central Urals today is presented by the implementation of projects included in the list of priority investment projects at the regional level to provide tax measures support.

One of the most promising areas of industrial development in terms of local municipalities' potential economic strengthening consists in the development of programmes in the forestry sector based on the long-term development of the territorial forest systems, expanding cooperation of timber production with the industries of advanced raw wood processing in the framework of the intensification of inter-municipal cooperation. [15]

### Staff Acquisition of the Innovative Development of the Industry

Activities aimed at personnel training and securing the enterprises needs for highly qualified specialists are among the key areas of the industrial policy. In the Central Urals, a comprehensive programme "Ural engineering school" was developed and approved in 2014 to deal with these issues. Together with Ural universities the large industrial enterprises including UMMC-Holding, Kalinin Machine Plant, etc. took part in this work.

### Conclusion

In 2014, the Federal Law "On Industrial Policy in the Russian Federation" was signed <sup>5</sup>; this legislation defines goals, objectives and principles of the policy and the system of measures on regulation and support of the priority industries development of the industrial complex of Russia. The implementation of the law is aimed at a change in the development patterns of the domestic economy and stimulation of the high-competitive industry formation.

According to the signed Law, the basic priority of the state industrial policy is the defence industry development. Unfortunately, regional and municipal sections of the industrial policy are only briefly referenced in this law. Meanwhile, as had been noted above, consideration of the characteristics of independent areas is a key factor in determining the success of the industrial policy. This circumstance dictates a need for the rapid adoption of the regional laws on industrial policy, which should establish not only the goals and objectives of implementation, but also the proposed specific measures for each region to support their industrial development.

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